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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,949	01/26/2004	Ming-Gung Li	14215 B	9325
23595	7590	01/30/2006		
NIKOLAI & MERSEREAU, P.A. 900 SECOND AVENUE SOUTH SUITE 820 MINNEAPOLIS, MN 55402			EXAMINER GRAYSAY, TAMARA L	
			ART UNIT	PAPER NUMBER
			3636	

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/764,949

Applicant(s)

LI, MING-GUNG

Examiner

Tamara L. Graysay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because of the following:

The character of the lines is not satisfactory because every line is not clean, and uniformly thick and well-defined. For example:

- i. The explosion lines in FIG. 1 are confusing because they are the same thickness as the elements of the invention. They should be distinguished from the lines used for the elements of the invention, e.g., thinner or dashed for clarity.
- ii. The upper pressing bar of the long rib is not visible in FIGS. 1 or 2 due to the uneven thickness of the lines.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities:

Line 19 (as numbered by applicant): [lobe0] should be lobe to correct a typographical error.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Huang (US-6655398).

Huang FIG. 4 depicts the claimed invention including the connections of each element of the umbrella frame comprising: a lower runner 12, a main shaft 10, an upper runner 11, a plurality of stretching frames 30. Each stretching frame 30 having a stretcher 33, a connection plate 35, an elastic rod 77, a connector 46, a distal rod 43, a long rib 40, and a short rib 31. The elements are connected as depicted at the left side of FIG. 4 of the present application. The hooks of the elastic rod are shown in Huang FIG. 2.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (6655398) in view of Lin (US-6296001).

Huang discloses the use of plastic having metal reinforcing (2:65-67) for the long rib (strut 31) but is silent as to the material used for the other elements.

Lin teaches an elastic rod 26 made of metal.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Huang to include various materials including metal for the elastic rod and plastic or plastic composition for the remaining structural elements because the particular material used for an element would have been a matter of design choice held to be within the level of ordinary skill in the art. The design choice made by one of ordinary skill in the art would have taken into consideration the particular application and use of the element as well as the desired structural integrity of the element, not to mention cost. Applicant has not provided any unexpected result of using metal for the long rib, but rather has only stated the obvious – that generally, metal would be preferred in order to prolong the life of an element under repeated stress.

Therefore, the otherwise unpatentable device is not rendered patentable based on a design choice from among known materials.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Wang (US-2004/0025915) lacks the short rib having an upper protruded bar having a round aperture and the elastic rod hooked in the round aperture of the upper protruded bar.
- Kuo (US-2002/0062850) inter alia lacks the long rib having an upper pressing bar and the elastic rod inserted through a spacing defined by the upper pressing bar and the long rib.
- Liu (US-6834659) inter alia lacks the long rib having an upper pressing bar and the elastic rod inserted through a spacing defined by the upper pressing bar and the long rib.
- You (US-6758228) inter alia lacks the long rib having an upper pressing bar and the elastic rod inserted through a spacing defined by the upper pressing bar and the long rib.
- Kuo (US-5494065) additionally includes an extension of the connection plate 5 that is interconnected with a middle runner.
- Wingfield (US-5641013) teaches a lower runner 23, a main shaft 21, an upper runner 22, and stretching frames having a stretcher 28, a connection plate 28a, an elastic rod 30b, a connector 27, a distal rod 31, a long rib 30, and a short rib 29 connected to operate in the same fashion as the present invention.
- Lin (US-5564449) inter alia teaches a lower runner 17, a main shaft 13, an upper runner 16, and stretching frames having a stretcher 22, a connection plate 25, an elastic rod 272, a connector 261, a distal rod 26, a long rib 24, and a short rib 21 connected to operate in the same fashion as the present invention.


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- Lin (US-5390686) teaches a lower runner 23, a main shaft 21, an upper runner 22, and stretching frames having a stretcher 28, a connection plate 28a, an elastic rod 30b, a connector 27, a distal rod 31, a long rib 30, and a short rib 29 connected to operate in the same fashion as the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara L. Graysay whose telephone number is (571) 272-6728. The examiner can normally be reached on Mon - Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo, can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Tamara L. Graysay  
Examiner  
Art Unit 3636

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